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MEMORANDUM

Date: June 20, 2013

To: Carol Stemrich and Jolene Sheil, Public Service Commission of Wisconsin

From: William S. Haas, Program Director
Ann Grodnik-Nagle, Director of Performance Management
Tamara Sondgeroth, Director of Operations

Re: Status of 2013 Renewable Energy Commitments

Overview and Background:

To ensure compliance with the Public Service Commission of Wisconsin's ("Commission") 2012 order regarding renewable energy technology inclusion in Focus on Energy, and to document that the Program Administrator is appropriately budgeting, contracting, tracking, and maintaining cost-effectiveness, this memorandum describes the process of funding of renewable energy technologies, the status of renewable energy technology funding commitments, and implementation for funding renewable energy technologies in Focus on Energy.

In May 2011, the Program Administrator evaluated renewable energy technology projects with funding commitments issued under the legacy business and residential sector programs, the results of which are shown in Table 1 below. The analysis revealed that in 2011 over 20 percent of all Focus on Energy incentive spending went to renewable energy projects, achieving approximately 3 percent of the total mandated energy savings. Consequentially, the Program Administrator temporarily suspended all renewable energy program offerings in the middle of 2011 and did not offer incentives for renewable energy technologies until the summer 2012, after the Commission's Order was issued.

Table 1. Historical Focus on Energy renewable energy funding

Year	Total Budget	Incentive Budget Total	% Incentives	Energy Efficiency Incentives Paid Out	Renewable Incentives Paid Out	% Renewable Incentives
2008	$73,044,700	$42,176,000	57.74%	$38,102,500	$4,073,500	9.66%
2009	$91,307,600	$57,511,100	62.99%	$51,088,100	$6,423,000	11.17%
2010	$86,979,200	$58,591,300	67.36%	$49,600,800	$8,990,500	15.34%
2011	$75,285,376	$47,264,104	62.78%	$36,703,196	$10,560,908	22.34%

Sources: LAB Report Table 11 (page 28), SPECTRUM/WECC's renewables database, 2011 financial statement

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On April 26, 2012, the Commission issued Order to Docket 5-GF-191 that identified criteria for inclusion of renewable energy technologies into the portfolios of Focus on Energy programs. The Order requires that the cost-effectiveness of renewable energy measures and programs be determined in the same manner as energy efficiency measures and programs. The Order also requires that the annual renewable energy incentive level for 2012, 2013, and 2014 cannot exceed $10 million in a given year. In addition, for program years 2013 and 2014, the Order requires 75 percent of total incentives be allocated to the more cost-effective Group 1 Technologies (biomass, biogas, and geothermal) and 25 percent of total incentives be allocated to the less cost-effective Group 2 Technologies (solar photovoltaic, solar thermal, and wind).

Finally, the order stipulates that incentive funding is contingent upon Focus on Energy's overall benefit-to-cost ratio being at least 2.3 (inclusive of renewables) and requires that the inclusion of renewable energy technology incentives cannot reduce energy savings by more than 7.5 percent in comparison to an efficiency-only program.

In order to comply with Commission's Order, the Program Administrator is currently facing three requirements, each of which must be met in the implementation of renewable energy technology funding. These three constraints are as follows:

1. Funding expectations for 2013 and 2014
2. Cost-effectiveness of renewable energy projects
3. Group 1/Group 2 technology funding split

This memo further explores these constraints and details Focus on Energy's portfolio compliance status and methodology for implementation.

1. FUNDING EXPECTATIONS FOR 2013 AND 2014

<u>Legacy Renewable Energy Technology Funding:</u>

Targeted Markets legacy sector programs provided incentive agreements for renewable energy technologies until July 2011. The incentive agreements committed Focus on Energy funds for up to 24 months from the time of initial application. Due to the time lag, these legacy renewable projects are accounted for in Focus on Energy's legacy sector renewable energy pipeline and current program implementers are responsible for project tracking, conducting onsite verification, and processing incentive payments. Targeted Markets Implementer contracts were structured to capture and account for legacy sector renewable energy incentive and non-incentive budgets, pipeline, and energy savings projections.

In SPECTRUM, the legacy sector renewable energy projects are tracked within the Targeted Market program to which the project was transferred. For example, legacy commercial sector

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projects may reside in either the Business Incentive Program or the Large Energy Users Program. The achieved and obligated renewable energy budget and savings are tracked separately from energy efficiency savings. The Program Administrator has directed Program Implementers to complete legacy sector renewable energy projects and process committed incentives as appropriate.

2012 Renewable Energy Technology Funding:

In 2012, renewable energy measures were exempt from the cost-effectiveness requirements and $7.9 million of legacy renewable energy project pipeline was expected to be paid in 2012. Accordingly, the available funding for new renewable projects was approximately $2 million and the Program Administrator made the following allocations to fund new renewable energy projects:

- $500,000 for residential solar and ground source heat pump projects.
- $1.5 million for a series of competitive requests for proposals, the Renewable Energy Competitive Incentive Program (RECIP), with funds split evenly between Group 1 technologies and Group 2 technologies.

At the close of program year 2012 the number of legacy renewable energy projects processed for payment was less than forecasted and approximately $4.5 million (57 percent) of committed projects were paid out. The legacy projects that were not paid out received notice that their funding would be granted a final extension. A complete listing of legacy sector incentive payments paid in 2012 by program is provided below in Table 2.

Table 2. Incentives paid by program in 2012

Program	Paid Incentives
Multifamily New Construction Program	$142,900.69
Multifamily Whole Building Program	$51,549.00
Multifamily Energy Savings Program	$21,770.00
New Homes Program	$6,850.00
Residential Renewables Program	$465,791.59
Residential Rewards Program	$128,408.40
Agricultural Sector Program (legacy program)	$731,015.50
Business Incentive Program	$620,969.83
Chain Stores and Franchises Program	$ -
Commercial Sector Program (legacy program)	$580,370.03
Industrial Sector Program (legacy program)	$497,092.60
Large Energy Users Program	$250,000.00
Schools & Government Sector Program (legacy program)	$982,517.19
Renewable Energy Competitive Incentive Program	$ -
TOTAL	**$4,479,234.83**

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2013 Renewable Energy Technology Funding:

According to the Order, Focus on Energy may not exceed the $10 million limit on annual funding of renewable energy projects. Also, in 2013 and 2014, the cost-effectiveness requirements and the Group 1/Group 2 funding split must also be met.

Because the lead and development time associated with renewable energy projects, particularly Group 1 projects, is so long, there is a significant delay between funding allocation and payout. To account for this delay, the Program Administrator is including both payouts and obligations when calculating the dollars available for renewable energy in a particular year. The Program Administrator is conservatively forecasting costs so that in any one calendar year, if an obligated project will pay out in a subsequent calendar year it may be added to the value of projects which will have incentives paid in the current calendar year. However, to avoid double counting, if a project is both obligated and will be paid out in the same calendar year, it is counted only as a paid project for the current calendar year.

Additionally, the Order does not specify an amount or percentage of the incentive budget for administration and implementation of renewables in 2013 and 2014. The Program Administrator is considering incentive and non-incentive costs when calculating the dollars available for renewable energy in a particular year. Given that the Focus on Energy base budget for 2013 and 2014 is $85.8 million and the base incentive budget is $58.5 million, $10 million authorized for renewable energy projects represents 11.7 percent of the total budget and 17 percent of the incentive budget. Allocating $10 million to incentives alone (exclusive of implementation costs) would fund renewables at a far higher level than previous years. Acknowledging the historical guideline of directing 10 percent of the Focus on Energy base budget to renewable energy, it is assumed that the $10 million allocated for renewable energy funding will cover the total costs of delivery of renewable energy incentives, including project acquisition and processing of incentives.

Observing the methodology described above, and as shown in Table 3 below, Focus on Energy total forecasted renewables funding is currently in compliance with the $10 million limitation imposed by the Commission’s Order. For 2013, the Program Administrator has made budget allocations of **$3,623,734** to fund new renewable energy projects. These allocations will pay out in 2014 or beyond:

- **$3.36 million** for the RECIP and Design Assistance Program Group 1 renewable energy technologies.
- **$260,000** for RECIP Group 2 renewable energy technologies.

In addition to the allocations made in 2013 that will pay out in future years, Focus on Energy has paid out, as of June 1, 2013, $820,817 for legacy renewable energy projects, projects awarded

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under the 2012 RECIP, and prescriptive residential renewables. An additional $2,809,817 in renewables project pipeline is expected to be completed in 2013. In total, Focus on Energy expects to pay and obligate $7,254,369 in incentives and implementation funding for renewable energy projects in 2013. Table 3 details this funding, broken out by Group 1 and Group 2 technologies.

Table 3. Renewable energy incentive and implementation funding paid and obligated in 2013*

	Paid Out 1/1/2013 to 6/1/2013	Forecast for payout in 2013	Obligated in 2013	Total
Group 1	$129,237	$1,508,865	$3,365,134	$5,003,236
Group 2	$691,581	$1,256,952	$258,600	$2,207,133
Other**	$ -	$44,000	$ -	$44,000
TOTAL	**$820,817**	**$2,809,817**	**$3,623,734**	**$7,254,369**

** Implementation costs are forecasted based on an assumption of 13 percent of incentive costs.*
***The Other category includes a legacy staffing grant.*

2. COST EFFECTIVENESS OF RENEWABLE ENERGY PROJECTS

As shown in Table 4 below, Focus on Energy renewable funding is in compliance with the cost-effectiveness constraints imposed by the Commission's Order. As calculated by the approved Cost Effectiveness Calculators, the Total Resource Cost (TRC) test of the efficiency-only portfolio of programs results in a TRC of 3.08.[1] When renewables are combined with the efficiency-only portfolio, the resulting TRC is 2.98. This combined TRC exceeds the 2.30 benefit-to-cost ratio requirement outlined in the Order. The inclusion of renewable reduces the energy savings of an efficiency-only portfolio by 3.3 percent which is reasonably below the 7.5 percent reduction limit set in the Order.

Table 4. Portfolio TRC tests

Portfolio	TRC
Efficiency only portfolio	3.08
Renewables only	1.46
Efficiency plus renewables	2.98

[1] The TRC formula used in these calculations is identical to the TRC formula used by the Evaluator in the 2012 Evaluation Report, and represents a ratio of program benefits to program costs. Program benefits include the value of net saved energy (avoided costs) and the value of avoided emissions. Program costs include all non-incentive costs and the aggregate incremental measure costs multiplied by the net-to-gross ratios.

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3. GROUP 1/GROUP 2 TECHNOLOGY FUNDING SPLIT

As shown in Table 5 below, the required 75 percent/25 percent incentive payout allocation between Group 1 technologies and Group 2 technologies is nearly met for 2013 and 2014, based on the Program Administrator's forecasts. The discrepancies between the target and actual split are due to the uncertainties and long time horizons associated with the Group 1 projects that received funding approval.

The 2013 RECIP round and the residential renewables funding for 2013 was allocated to ensure portfolio compliance with the required Group 1/Group 2 proportions, taking into account the forecasted payouts for legacy projects. However, payout distribution for renewable energy projects is uncertain and unpredictable, and includes legacy projects and prior allocations that were not required to comply with the Order's proportions. The Program Administrator controls the allocation of funding so that the Group 1/Group 2 split requirement is met; the Program Administrator cannot control when these allocations are actually paid out. Thus, the Group 1/Group 2 split requirement is currently the limiting constraint for renewable energy funding in 2013.

Because Group 1 technologies typically have longer lead and development times, it is not likely that Group 1 technology projects could be procured and completed in 2013. When the distribution splits for 2013 and 2014 are considered in aggregate, to equalize the impact of the development time horizons for Group 1 renewable energy projects, the 75/25 percent split is very close to compliance, at 73/27. The planned 2014 RECIP round will target Group 1 technologies to bring this combined split into compliance with the Order.

Table 5. Group 1/Group 2 Technology Funding Split

Technology	2013 - % Split for Obligated and Paid Projects	2014 - % Split for Obligated and Paid Projects	2013-2014 Combined % Split for Obligated and Paid Projects
Group 1	69%	78%	73%
Group 2	31%	22%	27%
Other	0%	0%	0%
TOTAL	100%	100%	100%

**The legacy staffing grant is excluded from the % split calculation until further direction is given by the Commission.*